## UNIVERSITY OF MASSASCHUSETTS BOSTON CENTER FOR PERSONALIZED CANCER THERAPY PRESENTS THE FALL 2015 SEMINAR SERIES:

## MONDAY, DECEMBER 7, 2015 AT 2:00PM INTEGRATED SCIENCES COMPLEX ISC-

## PAUL MARKER, PH.D. PROFESSOR AND ASSOCIATE DEAN FOR RESEARCH THE SCHOOL OF PHARMACY THE UNIVERSITY OF WISCONSIN, MADISON

**TITLE:** Identifying molecular mechanisms of prostate cancer using transposon-mediated mutagenesis and mouse models

**SUMMARY:** Using the **Sleeping Beauty (SB) transposon system** as a genetic tool, my laboratory has generated new transgenic lines that express the SB transposase in prostate epithelial cells. We havehave used these lines to conduct **somatic mutagenesis** screens to discover new genes important for prostate cancer

development and/or progression. This work identified *phosphodiesterase 4d (PDE4D)* as a candidate prostate cancer driver gene and as a candidate drug target in prostate cancer. In related studies, we identified *MAGI2* as a candidate driver gene and biomarker for castration resistant prostate cancer. Ongoing research includes



further characterization of the molecular pathways impacted by *PDE4D* and *MAGI2* in prostate cancer as well as further development of mouse models for human prostatic diseases.

HOSTED BY: JILL MACOSKA, CPCT DIRECTOR

